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ABSTRACT

This multi-site project, in its second year of funding, proposed to provide instruction in English as a second language (ESL) and native language arts, in addition to bilingual instruction in mathematics, science, and social studies to 294 Hispanic, Chinese, and Haitian students in grades 9-12 at three high schools. Students varied widely in English proficiency, ability in their native languages, and overall academic preparedness. Instructional goals included: (1) to provide basic academic skills instruction in English and students' native languages; (2) to foster a positive self-concept through study of students' native cultures and American heritage; (3) to encourage academic achievement and high school graduation; and (4) to foster acquisition of basic skills and orientation for careers in health, law and business related fields. Bilingual science classes were offered at all three sites; bilingual mathematics classes at two sites; and bilingual social science classes at one site. Students mastered an average of 1.1 Criterion Referenced English Syntax Test (CREST) objectives per month. Pretest and posttest data were not available, but passing rates in native language arts classes were high. Business/health career course objectives were met. Dropout rates were lower than those of mainstream students, but did not meet the proposed criterion.
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PROJECT CAREERS

1984-1985

OEA Evaluation Report

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O.E.A. Evaluation Section Report

Robert Tobias, Administrator of Evaluation
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Grant Number: G00-830-2145

PROJECT CAREERS

1984-1985

Project Director:
Mr. Angelo Gatto

Prepared by the
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A SUMMARY OF THE REPORT

This multi-site project, in its second year of funding, proposed to provide instruction in English as a second language (E.S.L.) and native language arts, in addition to bilingual instruction in mathematics, science, and social studies to 294 Hispanic, Chinese, and Haitian students of limited English proficiency in grades nine through twelve at three New York City high schools in Queens. The participating sites included Andrew Jackson High School, John Bowne High School, and William Cullen Bryant High School. Thirty-five percent of the program students were Asian-born; most of these students were born in the People's Republic of China. Spanish-speaking students comprised 38 percent of the program population; of these, the largest number were born in Panama. Students varied widely in English proficiency, ability in their native languages, and overall academic preparedness.

The major instructional goals of the program were:

- To provide a program of instruction that would enable students to improve their basic academic skills in both English and their native language;
- To foster a positive self-concept through the study and appreciation of both students' native cultural heritage and American heritage;
- To encourage students to increase their academic achievement, to continue their studies, and to graduate; and
- To foster the acquisition of basic skills in health careers, law-related careers, and business education -- in addition to providing career orientation.

Title VII funds supported administrative, support services, and paraprofessional staff positions. The three project sites had established tax-levy E.S.L. programs prior to the inception of Project CAREERS; instructional services in E.S.L. were funded by a combination of P.S.E.N., tax-levy, and Chapter I monies. Native language arts instruction was provided at Bryant and John Bowne, and was available in French for the Haitian Creole-speaking students at Andrew Jackson. In the content areas, students at Bryant participated in bilingual mathematics, biology, and social studies classes; Andrew Jackson began offering bilingual courses in math and science in February; and John Bowne developed a bilingual science class. Finally, to address the career-oriented project goals, both Bryant and John Bowne established project resource rooms and staff conducted individual and group guidance activities and assisted students in obtaining career and college information. According to the principal at Andrew Jackson, there was no room available for the project to use as a resource center, and therefore this component had not been implemented at this site.

Curricula were developed during the summer of 1984 in the areas of computer science, business law, recordkeeping, Spanish American literature, career education, and global history. However it was reported by on-site staff that these materials could not be used since they did not correspond with the courses offered at the schools.

The project also proposed to supply each site with microcomputers for student use. The computers were delivered to all three schools, but as of the spring, had not been set up for student use.

Additionally, although the project proposed to provide a series of training sessions to meet the needs of staff members, no evidence of in-house staff development activities were reported at any project site. None of the schools had established the proposed E.S.L./Americanization classes for parents of participating students. However, important links with the parents of bilingual students were being developed at each site.

Project objectives were assessed in English language development (Criterion Referenced English Syntax Test [CREST]); native language arts (teacher-made tests); mathematics, science, social studies, business, and health careers (teacher-made tests); and dropout (school and project records). Quantitative analysis of student achievement data indicates that:

- Overall, students mastered an average of 1.1 CREST objectives per month of instruction in the fall and spring.
- As pretest and posttest data were not available, the program objective in native language arts could not be assessed as proposed. However, passing rates for Haitian Creole- and Spanish-speaking students in native language arts courses were high, 92.4 and 76.4 percent, respectively.
- Students were unable to reach the criterion of 80 percent receiving a grade of 75 in mathematics, science, and social studies courses either in the fall or the spring. However, students in business/health careers courses did meet the objective in the fall.
- The dropout rate of project students was lower than that of mainstream students at Andrew Jackson and W.C. Bryant; however, the differences do not reach the proposed 10-15 percent.

The following recommendations are aimed at improving the overall effectiveness of the program:

- The director should contact each school administration to ensure that it provides space and services as promised, and to inform all sites about the services available through Title VII funding.

- Monthly meetings with staff from all three sites should be held to discuss common difficulties and solutions.
- Program staff should conduct a needs assessment for new staff members and the school staff working with the LEP students, and they should design a staff development program accordingly.
- Curriculum development activities should be based on the needs identified during the school year.
- The microcomputers should be set up for student use.
- Efforts should be made to organize cultural and educational trips for project students.
- Career development, which is a major project component, needs to be incorporated more systematically into project activities and classes.
- John Bowne should expand its bilingual content-area offerings to include mathematics and social studies, where the numbers of students are sufficient to warrant it.
- The administration at Andrew Jackson should allocate space for the project resource room and for setting up the computers.

ACKNOWLEDGEMENTS

The production of this report, as of all Office of Educational Assessment Bilingual Education Evaluation Unit reports, is the result of a cooperative effort of regular staff and consultants. In addition to those whose names appear on the cover, Eulalia Cabrera has interpreted findings, integrated material into reports, and has written report summaries. Patricia Fitzpatrick has spent many hours creating, correcting, and maintaining data files. Finally, Joseph Rivera has worked intensively to produce, correct, duplicate, and disseminate reports. Without their able and faithful participation the unit could not have handled such a large volume of work and still produced quality evaluation reports.

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The Queens Borough Bilingual Education Career Institute
for New York City High School Students
PROJECT CAREERS

Central Location: 1171 65th Street
Brooklyn, New York 11219

Participating Schools: Andrew Jackson High School
207-01 116 Avenue
Cambria Heights, New York 11411

John Bowne High School
63-25 Main Street
Flushing, New York 11367

William Cullen Bryant High School
48-10 31st Avenue
Long Island City, New York 11103

Year of Operation: 1984-1985, Second year of funding

Target Languages: Haitian Creole, Chinese, Spanish

Number of Participants: 294 students

Project Director: Mr. Angelo Gatto

I. PROGRAM DESCRIPTION

Project CAREERS is a multi-site program in its second year of operation. The project's basic goal is to help limited English proficient (LEP) students acquire second language proficiency while developing reading and writing skills in their native language. The project proposed to provide instruction in English as a second language (E.S.L.), native language arts, and bilingual instruction in mathematics, science, and social studies to Hispanic, Chinese, and Haitian LEP students at W.C. Bryant, John Bowne, and Andrew Jackson High Schools. Additionally, the project aimed to emphasize career awareness and training, as well as the cultural and ethnic heritages of the target population. Proposed non-instructional

services included guidance and curriculum development, and E.S.L./Americanization classes for parents of student participants.

In the 1984-85 academic year, the program served 294 LEP students: 111 Spanish-dominant students at W.C. Bryant; 78 Haitian Creole-dominant at Andrew Jackson; and 102 Chinese-dominant at John Bowne.

In the second year of operation, each program site made noticeable improvements towards implementing the program as proposed. These changes appeared to be the result of the commitment of the assistant principal (A.P.) in charge of the project at each site towards providing proposed services for the LEP students. In addition, each school contacted the Division of High Schools for assistance in implementing the project according to proposed guidelines. However, problems still remain.

The project proposed a staff of 20; however, in spring 1985, only eight positions had been filled. The centrally-located project director, responsible for administering the project and supervising and training the staff, was also responsible for eight other Title VII projects. As a result, he had minimal communication with the on-site staff. In April 1985, a coordinator was hired to oversee the program. (She also coordinated another Title VII project.) The new coordinator was eager to facilitate changes for 1985-86.

The on-site staff included three bilingual resource teachers, two paraprofessionals (Spanish and Haitian), a Haitian parent trainer (located at Sacred Heart Church), and an office aide (centrally located). John Bowne did not hire a paraprofessional. It was stated that due to the resource teacher's higher salary, no funds were available to fill this position. The school, however, had recently hired a Chinese-speaking

paraprofessional supported by P.S.E.N. (Pupils with Special Educational Needs) funds, who worked with program students.

The resource teachers, A.P.s for foreign languages, and the three bilingual resource teachers were responsible for the day-to-day coordination of the project. The resource teachers at Andrew Jackson and John Bowne, both with graduate degrees in education, were highly respected within the high schools and were instrumental in implementing the program and providing additional time for the students. Twice a week, after school, the Chinese resource teacher supervised the Chinese basketball and volleyball team. He was also very supportive of the Chinese club and was in close contact with students' parents. The resource teacher at W.C. Bryant developed a "buddy system" where new program students were paired with older students who provided them with support and help.

At Andrew Jackson, two new staff members were responsible for implementing program activities: the A.P. for foreign languages, who assumed this position in an acting capacity in September 1984; and the Haitian resource teacher, who began in February 1985. According to the A.P. for foreign languages, the bilingual students and staff were instrumental in helping her realize the advantages and benefits of bilingual education. The resource teacher, who had previously worked as a paraprofessional with another Title VII project, helped identify eligible students and developed contacts with the school administration and parents.

The program's organization was strongly influenced by the overall organization of the school and the on-site supervisor's involvement with the program. At all three sites, the A.P.s worked closely with the program staff.

II. STUDENT CHARACTERISTICS

The entrance and exit criterion used by the program was each student's score on the English version of the Language Assessment Battery (LAB). Only those students who scored below the twenty-first percentile on the LAB were eligible for the program. Students were then interviewed in their native language by the resource teacher, who also sampled their reading and writing skills. The interview also elicited information not revealed by test scores alone, including the student's educational and migration history, general interests, and goals.

The students from all three language groups were recent immigrants, who were facing cultural and language barriers. Table 1 presents the program students by native language and country of birth. Fifty-four percent of the program students were female, and females outnumbered males at every site except at Andrew Jackson. Most of the students (41 percent) were eleventh graders; the twelfth grade had the smallest number of students enrolled (14 percent). Forty-six percent of the students were overage for their grade placement (see Table 2). The highest percentage of overage students occurred at Andrew Jackson (68 percent), reflecting the educational histories of these Haitian students. Fifty-five percent of the students had been in the project for two years; thirty-one percent of the students were new to the project in September (see Table 3).

The majority of the Hispanic students were from South America, particularly Panama and Colombia, and were from low socioeconomic backgrounds. Most were reportedly from single-parent families with many children. According to program staff, students had great difficulty in finding jobs because they were not permanent residents. One staff member noted that

students needed to know English even to work as stockpersons. One program student, living with his sister who was attending college, was working as a "bus boy" to pay for his share of the expenses. Commenting on the initial difficulties students experienced, the resource teacher stated that they were thrown into the school system with no direction or orientation. They lacked awareness of what a "credit system" was or who the school authorities were, and their parents were unable to help them because they too did not understand the system.

The Chinese students were described by staff members as motivated, ambitious, quiet, reserved, and above grade level in math and science. The majority of the students were from Mainland China and Taiwan. According to program staff, the former students were not well prepared academically, whereas the latter came with a good educational background, but lacked English skills. Staff stated that both parents and students came to the project office for help with "generation gap" conflicts because Chinese and American values differ. According to some of the parents of program students, American values gave much more freedom to teenagers as compared to what they considered appropriate within their own culture.

Commenting on the Haitian group, staff members stated that the students tended to stay together and speak their native language because "...they don't feel understood by American students." Most of these students were from lower middle class two-parent families. One student was commuting an hour and a half a day because she still wanted to participate in the program, even though her parents had moved to Brooklyn.

TABLE 1

Number and Percent of Program Students
by Language and Country of Birth

Language	Country of Birth	Number	Percent
Spanish	Panama	23	9
	Colombia	20	7
	Other Central and South American Countries	23	8
	United States	16	5
	Dominican Republic	11	4
	Puerto Rico	9	3
	Other Caribbean	5	2
	Spain	1	less than 1
	Unknown	3	1

Mandarin	China	53	18
	India	22	8
	Other Asian	3	1
	Taiwan	1	less than 1

Cantonese	Taiwan	17	6
	India	6	2

Haitian/Creole	Haiti	78	27

Total		291 ^a	100

^a Data were missing for three students.

•Thirty-seven percent of all program students are native speakers of Spanish; the three largest subgroups were born in Panama, Colombia, and various Central and South American countries. The next largest subgroups were from the United States and the Dominican Republic.

•The second group is comprised of Mandarin speakers (27 percent of the total) and Cantonese speakers (8 percent of the total).

•The third largest group of program students were born in Haiti. They are Haitian Creole speakers.

TABLE 2
Number of Program Students by Age and Grade

Age	Grade 9	Grade 10	Grade 11	Grade 12	Total
14	7	1			8
15	11	10	3	0	24
16	16	38	19	1	74
17	5	19	48	4	76
18	3	8	24	13	48
19	6	4	14	10	34
20		2	10	6	18
21			1	3	4
22				1	1
TOTAL	48	82	119	38	287 ^a

Overage Program Students

Number	30	33	49	20	132
Percent	63	40	41	53	46

John Bowne High School^b

Number	10	10	17	9	46
Percent	48	34	49	60	46

William C. Bryant High School^c

Number	4	12	14	3	33
Percent	80	33	25	27	30

Andrew Jackson High School^c

Number	16	11	18	8	53
Percent	73	65	67	67	68

Note. Shaded boxes indicate expected age range for grade.

^aData missing for seven students.

^bData missing for five students.

^cData missing for two students.

.Forty-six percent of the project students were overage for their grade.

.The highest percentage of overage students occurred at Andrew Jackson (68 percent).

.Overall, the ninth grade had the highest percentage of overage students.

TABLE 3

Time Spent in the Bilingual Program^a
(As of June 1985)

Time Spent in Bilingual Program	Grade 9	Number of Students		Grade 12	Total
		Grade 10	Grade 11		
<1 Academic Year	3	7	3	0	13
1 Academic Year	34	30	21	3	88
2 Academic Years	11	43	82	22	158
3 Academic Years ^b	0	2	11	12	25
4 Academic Years ^b	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>2</u>
TOTAL	48	82	118	38	286

^aRounded to the nearest year.

^bReflects participation in previous bilingual programs at the schools.

- The majority of the students (158 or 55 percent) have been in the program for two years.
- Eighty-eight students (31 percent) have been in the program for one year. These students are more or less evenly distributed in grades nine through eleven.
- Twenty-five students (nine percent) have been in the program for three years; thirteen students (five percent) have been in the program for less than one year.

III. FINDINGS

The evaluation findings for the 1984-85 academic year include both objectives measurable by standardized test results, and those based on examination of program materials and records, site visits, and interviews with relevant personnel. Following are the findings presented by objectives as proposed to and accepted by the Office of Bilingual Education and Minority Languages Affairs, U.S. Department of Education.

ENGLISH AS A SECOND LANGUAGE

- Eighty percent of the target students will demonstrate an appropriate increase in English language proficiency as indicated by mastery of one English syntax objective per twenty days of instruction demonstrated on the appropriate level of the Criterion Referenced English Syntax Test (CREST).

All three project sites had established tax-levy E.S.L. programs prior to the inception of Project CAREERS. At each site, the E.S.L. teachers worked with bilingual content-area and foreign language teachers as a strongly meshed group under the supervision of the A.P. for foreign language education.

At Andrew Jackson High School, E.S.L. was offered on four levels. One E.S.L. teacher, a linguist, worked particularly closely with program students and provided them with needed support while they adjusted to life in America. In addition, she organized an album of students' pictures and writing samples, and initiated a writing award contest. A Chapter I Haitian paraprofessional worked closely with the E.S.L. teacher and the program students, and as a team, they were a tremendous asset to the project.

John Bowne offered three levels of E.S.L. and required students to have

an English and Chinese dictionary with them in class. The school had developed a unique credit-bearing social studies sequence which paralleled E.S.L. instruction; students' placement in the sequence was coordinated with their E.S.L. level. The goal of this new approach was to facilitate foreign students' adjustment to their new country. The class covered such topics as: School Orientation, Our Neighborhood, Metropolitan Community, and History of New York.

Bryant High School had seven E.S.L. teachers and offered several sections and levels of E.S.L. instruction.

Student Achievement in E.S.L.

The assessment instrument used to evaluate the objective in this area was the Criterion Referenced English Syntax Test* (CREST). The CREST was developed by the New York City Public Schools to measure mastery of the syntax skills presented in the high school E.S.L. curriculum. The CREST uses four items to measure each skill, and mastery is achieved when three of the four items are answered correctly. The test has three levels: beginning (1), intermediate (2), and advanced (3). Levels 1 and 2 each measure mastery of 25 skills, while Level 3 measures mastery of 15 skills.

The CREST was administered at the beginning and end of each semester. A mastery score to indicate gains was computed for each student by calculating the difference between pretest and posttest. The number of months of instruction between testings was computed for each student by multiplying the number of months between testings by the student's

*Extensive information on CREST syntax skills and psychometric properties are in the Technical Manual, New York City English as a Second Language Criterion Referenced English Syntax Test. Board of Education of the City of New York, Division of High Schools, 110 Livingston St., Brooklyn, N.Y. 11201.

attendance rate. The number of skills mastered per month was calculated by dividing the mean mastery by the mean number of months of instruction between testings.

Table 4 presents the test results for students who were pretested and posttested with the same level. Of the students who were reported to be taking E.S.L. classes (levels 1, 2, and 3), complete data (levels, pretest score, and posttest score) were available for 93 students in the fall and 104 students in the spring. CREST results for each school are included as Appendix A.

Only 58.4 percent of the students in the fall and 55.1 percent of the students in the spring mastered one or more CREST objectives per month. However, on the average, program students achieved the objective criterion both semesters by mastering 1.1 CREST objectives per twenty days of instruction. Students demonstrated similar achievement at Andrew Jackson and W.C. Bryant. The high proportion of missing data from John Bowne preclude any conclusions about E.S.L. achievement at that site.

Students tested at Level 3 had lower performance rates than those tested at lower levels, partly because fewer skills are tested at that level and partly because mastery of objectives takes longer at that level. The program objective appears to be based on the assumption that progress across levels is linear; the lower achievement at Level 3, which is found frequently in other bilingual high school programs, suggests that it is not.

NATIVE LANGUAGE ARTS

- Eighty percent of the program participants will demonstrate a significant increase in their native language achievement as indicated by a significant improvement at the .05 level of statistical significance when results of a teacher-made instrument are analyzed using a correlated "t" test.

Bryant High School has institutionalized a native language arts program in Spanish which includes eleven sections of Spanish language arts. The CAREERS resource specialist teaches two Spanish classes which are funded by tax-levy.

At John Bowne, the majority of the program students are from Taiwan and Mainland China and speak Mandarin; the students from Hong Kong speak Cantonese. Although their oral dialects differ, these two groups are able to communicate through their written language. The resource teacher is fluent in both dialects, and teaches two Cantonese native language arts classes. The P.S.E.N. paraprofessional teaches Mandarin to advanced students who are proficient in English. They each develop their own curriculum for these classes.

Andrew Jackson offers French language arts classes. According to program staff, the Haitian students are well prepared educationally, and have a good knowledge of French. Both the E.S.L. teacher and bilingual content-area teacher use French to communicate with students.

Student Achievement in Native Language Arts

Since pretest and posttest results on teacher-made instruments were not provided, the program objective could not be assessed as proposed. However, final grades in native language arts classes for Haitian Creole- and Spanish-dominant students were provided and are presented in Table 5. Overall passing rates were higher in the fall than in the spring for both

groups, and were higher for Haitian Creole- than for Spanish-speaking students in both semesters. However, the overall passing rates were high for both Haitian and Spanish students, 92.4 and 76.4 percent. respectively.

TABLE 5

Passing Rates in Native Language Arts Courses

Language Group	Fall		Spring		Overall Passing Rate
	Number of Students	Percent Passing	Number of Students	Percent Passing	
Haitian Creole	39	100.0	40	85.0	92.0
Spanish	95	83.2	96	69.8	76.4

•Overall passing rates were high for both language groups.

INSTRUCTION IN CONTENT-AREA SUBJECTS

- Eighty percent of all target students will achieve a passing grade of 75 percent or better in the subject areas of mathematics, science, social studies, business and health careers as indicated by results on teacher-made tests, using tabulation of passing grades.

Bryant offered tax-levy courses in mathematics, general biology, and social studies taught bilingually to Spanish-speaking students. The math teacher described her main goal as "reorienting her students to math." A non-program teacher felt, however, that while there were advantages for having bilingual classes for students, it hindered their development in English language skills.

Andrew Jackson began offering bilingual courses in math and science in February, 1985. The newly hired teacher was fluent in both French and Creole; he mainly used French for instruction, and when needed used Creole. According to the school principal, the CAREERS program became better established with the addition of the resource teacher and the bilingual content-area teacher.

John Bowne developed a bilingual science class, taught by the P.S.E.N. paraprofessional who taught the Mandarin native language arts class. She worked with the science department to develop curriculum parallel to that used in the mainstream. Some students commented that they liked the class because it was taught in Chinese. Even though there was a Chinese-speaking math teacher on staff, no bilingual math course had yet been developed. According to the CAREERS resource teacher, there was a great need for such a class.

Student Achievement in Content-Area Subjects

Tables 6 and 7 present the passing rates for students in content-area courses at Andrew Jackson and W.C. Bryant. Data were provided for only two students at John Bowne, and therefore were not included in the analysis of student achievement. Examination of the tables reveals that students in fall business/vocational subjects at Andrew Jackson were the only group which had more than 80 percent receiving a grade of 75. It appears that the proposed objective was set too high for this population. More than 80 percent actually passed the courses with a grade of 65 or better.

TABLE 6

Passing Rates in Content-Area Courses

Andrew Jackson High School

Course	Number of Students	Percent Receiving a Grade of 75% or Higher	Percent Receiving a Grade of 65% or Higher
Fall			
Math	65	20.0	93.8
Science	61	27.9	90.2
Social Studies	67	25.4	95.5
Business/ Health Careers	8	87.5	100.0

Spring			
Math	70	27.1	75.7
Science	64	23.4	79.7
Social Studies	72	26.4	90.3
Business/ Health Careers	28	75.0	100.0

•The program objective of 80 percent receiving a grade of 75 or higher was met only in business/health careers courses in the fall semester.

TABLE 7

Passing Rates in Content-Area Courses

William C. Bryant High School

Course	Number of Students	Percent Receiving a Grade of 75% or Higher	Percent Receiving a Grade of 65% or Higher
Fall			
Math	86	32.6	100.0
Science ^a	179	38.8	75.4
Social Studies	93	33.3	74.2
Business/ Health Careers	48	60.4	81.3
Spring			
Math	88	38.6	63.6
Science ^a	170	41.7	83.5
Social Studies	91	38.5	71.4
Business/ Health Careers	44	52.3	68.4

^aThe number of students enrolled in science course exceeds the number of program students because some students were enrolled in more than one science course.

•The program objective was not met either semester.

BILINGUAL CAREER AWARENESS AND TRAINING

To address this unique objective of the proposal, W.C. Bryant developed a resource center and individual career planner profiles for each student. In addition, during the first project year, staff members held an Annual Career Seminar for bilingual students with speakers from public service, health, business and education careers. Because the resource teacher was on medical leave for a month, the Career Seminar was not held this year; however, students did receive career and guidance counseling and help with finding jobs and college applications.

Both the resource teacher and P.S.E.N. paraprofessional at John Bowne provided college and career guidance to the program students and established links with Queensborough College and St. Johns University.

According to the principal at Andrew Jackson, there was no room available for the program to use as a resource center.

The project proposed to supply each site with microcomputers for student use. The computers were delivered to all three sites, but as of spring 1985, had not been set up for student use. According to the central office, W.C. Bryant received three computers, John Bowne, two, and Andrew Jackson, two. The resource teacher at John Bowne had ordered computer software with Chinese characters and was planning to set up the computers in the resource room. At Bryant, the resource teacher was working with the math department so that the students could have additional access to their computers. Since there was no space available for the project resource room at Jackson, the project computers could not be set up at this site. The project coordinator was attempting to make alternate arrangements with the school's career department, so that students would have access to the computers.

STAFF DEVELOPMENT

The project proposed to provide a series of training sessions to meet the needs of participating staff members. These sessions were to include pre- and in-service workshops, conferences, and undergraduate and graduate courses at local universities. During the academic year, no centrally organized staff development activities were held, but some staff members attended activities outside of the school. The staff from Andrew Jackson attended a workshop on Computers in Education sponsored by the Division of Curriculum and Instruction of the New York City Board of Education. The present coordinator took a course at Fordham University. All program staff interviewed felt that they had not been adequately informed by the central office about Title VII funding available for university courses.

CURRICULUM AND MATERIALS DEVELOPMENT

The project proposed to develop materials in E.S.L., native language arts, and content-area subjects. According to the project coordinator, curricula were developed during the summer of 1984 in the following areas:

- Bilingual Business Recordkeeping (Spanish)
- Computer Science (Spanish)
- Paralegal Business Law (Spanish)
- Spanish American Literature (Spanish)
- Career Education (Chinese)
- Global History (Chinese)

However, it was reported by staff members that these materials were not being used since their content did not overlap with what was offered at each site. Staff expressed the need for more appropriate materials, particularly for use with Haitian students. They also felt that more contact between curriculum developers and on-site staff would be helpful in delineating specific curriculum needs. Finally, on-site staff members noted

that they had ordered no materials during the year since they had not been aware of available funding.

E.S.L./AMERICANIZATION CLASSES FOR PARENTS

One parent trainer offered E.S.L. classes to Haitians at the Sacred Heart Church in Queens; it could not be determined how many of these participants were parents of project students.

At John Bowne, the resource teacher developed a questionnaire informing parents about E.S.L. classes. In addition, he was in close contact with Chinese community agencies. Even though contacts and attempts were made at Bryant to organize E.S.L. classes, they had not begun.

PROJECT DISSEMINATION

The project proposed to disseminate information about its activities through bilingual newsletters, periodic staff and parental meetings, telephone calls, intervisitations, and informal discussions among staff members and parents. No bilingual materials were developed for this purpose during the first or second project year other than a booklet featuring program students' poems and stories published in conjunction with the foreign language department at one school. In addition, the resource teacher at one site set up a CAREERS bulletin board with pictures of program activities and students' poems.

AFFECTIVE DOMAIN

- Eighty percent of all target students will demonstrate an improvement in attitude toward their heritage as indicated by results on an appropriate Language Cultural Heritage Attitude Scale, tabulating growth from pre- to posttesting and ascertaining the percentage of students gaining one scale point or more on a five-point scale.
- Eighty percent of all target students will demonstrate an improvement in attitude toward school as indicated by results on a five-point scale inventory to measure interest in continuing education beyond their present grade, tabulating growth from pre- to posttesting and ascertaining the percentage of students gaining one scale point or more.
- The dropout rate of target students will be 10-15 percent less than that of mainstream students as indicated by school records, tabulating and comparing the percentage of dropouts for program students and mainstream students.

The first two objectives could not be assessed because the relevant data were not provided.

Table 8 presents the dropout rates for program students and for the entire school for both Andrew Jackson and W.C. Bryant High Schools. Dropout data were not available for John Bowne. Statistical significance of the difference between program and school dropout rates was determined through a z-test for the significance of a proportion. This procedure tests whether the difference between a group rate and a standard rate (the rate of the total population) is greater than it could be expected by chance variation.

Examination of the table reveals that the dropout rate of program students was lower than the schoolwide rate at both Andrew Jackson and W.C. Bryant. However, the differences do not reach the proposed criterion of a 10 to 15 percent difference. Nevertheless, the program at Andrew Jackson was successful in achieving a dropout rate significantly lower at the .05 level.

TABLE 8

Dropout Rates for Project and Mainstream Students

	Project	Mainstream ^a	Difference	Z-test
W. C. Bryant	6.3	10.8	4.5	-1.5
A. Jackson	1.3	10.0	8.7	-2.6*
J. Bowne ^b	---	6.1	---	---

* Statistically significant at the .05 level.

^aMainstream percentage are based on the total population of code school, thus including program students as well.

^bNo program dropout data available.

- The program objective of a 10-15 percent difference between program and mainstream students was not achieved.
- The drop-out rate for program students at A. Jackson was significantly lower then the school's dropout rate.

IV. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

In the program's second year, each participating site made improvements toward implementing the program as proposed. Bilingual content-area classes were offered in one or more subjects at each site; resource centers had been established at two of three sites. The observed changes appear to be the result of the commitment of the A.P. in charge of the project at each site to provide services to the target LEP students. A major strength of Project Careers was its dedicated on-site staff members.

Direction from the project's central office was limited in 1984-85. As a result, the A.P. at each school and the program staff had primary responsibility for implementing the program on-site. Problems beyond the building level tended to persist, however. The project remained understaffed in spring, 1985. Gaps remained in the range of services proposed (content-area classes were limited at Bowne; there was no resource center established at Jackson; and the computers had not been installed at any site). Staff development and parental involvement activities were limited. Student achievement, while similar overall to that noted for bilingual students in New York City high schools, fell below proposed standards. Finally, school staff expressed a need for more input into the curriculum development process, and more information about resources available through the project.

Having the coordinator working on-site should help facilitate program implementation, especially in the areas of planning, information and resource dissemination, and coordination.

RECOMMENDATIONS

-- This project would do well with more active direction and involvement by the director and coordinator. As some uncertainty exists as to who is responsible for supervising this project, there is a need to clarify the role and responsibilities of the new coordinator. The director should contact each school administration to ensure that it provides space and other services as promised, and to inform all sites about the services available through Title VII funding.

-- Monthly meetings with staff from all three sites may be an effective way to discuss common difficulties and how they can be solved.

-- Program staff should conduct a needs assessment for new project staff and school staff involved with the LEP students, and design a staff development program accordingly. Emphasis needs to be made on interdisciplinary cooperation.

-- Curriculum development activities held during the summer do not correspond with the specific needs of classes offered at each site. It is suggested that curriculum development should be based on input from teachers obtained during the school year.

-- Each site needs to make arrangements for setting up the computers for program use.

-- An effort should be made to organize cultural and educational trips for project students at all sites.

-- Career development, which is a major component of the project, needs to be incorporated more systematically into project activities and classes.

-- The social studies department at John Bowne High School has developed curriculum to help new immigrants adjust to life in the United

States. The coordinator might examine this curriculum and have it translated for all three language groups for use in the proposed E.S.L./Americanization component.

Site-specific Recommendations

-- John Bowne High School is urged to develop additional bilingual content-area classes in subject areas where the numbers of students warrant their formation.

-- The administration at Andrew Jackson should allocate space for the project resource room and for the computers, as part of its agreement to accept project services.

V. APPENDICES

APPENDIX A

Results of the Criterion Referenced English Syntax Test

Andrew Jackson High School

Test Level	Number of Students	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Mastery Mean	Mastery S.D.	Mean Mastery Per Month
Fall								
1	15	11.3	6.8	15.1	7.0	3.8	2.0	1.2
2	18	10.9	7.2	16.6	6.2	5.7	4.2	1.8
3	<u>14</u>	<u>8.2</u>	<u>3.4</u>	<u>9.9</u>	<u>2.8</u>	<u>1.6</u>	<u>1.4</u>	<u>0.4</u>
TOTAL	47	10.2	6.2	14.1	6.3	3.9	3.3	1.2
Spring								
1	31	13.2	6.6	17.6	5.3	4.4	2.8	1.7
2	23	18.6	3.8	21.2	3.5	2.6	2.0	1.0
3	<u>15</u>	<u>10.4</u>	<u>2.8</u>	<u>12.3</u>	<u>2.0</u>	<u>1.9</u>	<u>1.7</u>	<u>0.7</u>
TOTAL	69	14.4	6.0	17.7	5.3	3.3	2.5	1.3

*Posttest minus pretest.

•On the average, program students at Andrew Jackson mastered one CREST objective per month of instruction both semesters.

Results of the Criterion Referenced English Syntax Test

John Bowne High School

Test Level	Number of Students	Pretest		Posttest		Mastery*		Mean Mastery Per Month
		Mean	S.D.	Mean	S.D.	Mean	S.D.	
Fall								
1	6	17.3	3.8	19.3	3.5	2.0	1.7	0.7
2	2	17.5	4.9	21.0	1.4	3.5	3.5	1.2
3	<u>7</u>	<u>11.3</u>	<u>2.1</u>	<u>13.3</u>	<u>1.7</u>	<u>2.0</u>	<u>1.2</u>	<u>0.7</u>
TOTAL	15	14.5	4.3	16.7	4.1	2.2	1.7	0.7

Spring								
2	3	21.3	4.6	23.7	1.5	2.3	3.2	0.8
3	<u>9</u>	<u>9.4</u>	<u>3.2</u>	<u>12.3</u>	<u>2.4</u>	<u>2.9</u>	<u>1.9</u>	<u>1.0</u>
TOTAL	12	12.4	6.3	15.2	5.6	2.8	2.1	0.8

*Posttest minus pretest.

•Data reflect only 10 percent of the student population at John Bowne.

Results of the Criterion Referenced English Syntax Test

William C. Bryant High School

Test Level	Number of Students	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Mastery Mean	Mastery S.D.	Mean Mastery Per Month
Fall								
1	11	14.6	4.7	18.3	4.5	3.6	2.0	1.3
2	9	13.9	4.1	18.1	4.0	4.2	1.3	1.6
3	<u>11</u>	<u>8.0</u>	<u>3.1</u>	<u>10.2</u>	<u>2.8</u>	<u>2.2</u>	<u>1.4</u>	<u>0.8</u>
TOTAL	31	12.1	4.9	15.4	5.4	3.3	1.8	1.2
Spring								
1	12	17.3	4.3	21.1	3.6	3.8	1.8	1.4
3	<u>11</u>	<u>9.2</u>	<u>11.3</u>	<u>11.3</u>	<u>3.0</u>	<u>2.1</u>	<u>1.4</u>	<u>0.8</u>
TOTAL	23	13.4	5.5	16.4	6.0	3.0	1.8	1.1

*Posttest minus pretest.

•On the average, program students at W.C. Bryant mastered one objective per month of instruction both semesters.